LG-4878 REV. 9/89

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Document Processing Center (TS-790)
Office of Pollution Prevention and Toxics
Environmental Protection Agency
401 M Street., S.W.
Washington, D.C. 20460
Attn: Section 8(e) Coordinator (CAP Agreement)

Dear Coordinator:

8ECAP-0025

On behalf of the Regulatee and pursuant to Unit II B.1.b., Unit II B.2.a. (human effects) and Unit II C of the 6/28/91CAP Agreement, E.I. Du Pont de Nemours and Co. hereby submits (*in triplicate*) the attached studies. Submission of this information is voluntary and is occasioned by unilateral changes in EPA's standard as to what EPA now considers as reportable information. Regulatee's submission of information is made solely in response to the new EPA §8(e) reporting standards and is not an admission: (1) of TSCA violation or liability; (2) that Regulatee's activities with the study compounds reasonably support a conclusion of substantial health or environmental risk or (3) that the studies themselves reasonably support a conclusion of substantial health or environmental risk.

The "Reporting Guide" creates new TSCA 8(e) reporting criteria which were not previously announced by EPA in its 1978 Statement of Interpretation and Enforcement Policy, 43 Fed Reg 11110 (March 16, 1978). The "Reporting Guide states criteria which expands upon and conflicts with the 1978 Statement of Interpretation. Absent amendment of the Statement of Interpretation, the informal issuance of the "Reporting Guide" raises significant due processes issues and clouds the appropriate reporting standard by which regulated persons can assure TSCA Section 8(e) compliance.

For Regulatee,

Mark H. Christman
Counsel
Legal D-7158
1007 Market Street
Wilmington, DE 19898
(302) 774-6443

RECEIVED 2/23/95

ATTACHMENT 1

Submission of information is made under the 6/28/91 CAP Agreement, Unit II. This submission is made voluntarily and is occasioned by recent changes in EPA's TSCA §8(e) reporting standard; such changes made, for the first time in 1991 and 1992 without prior notice and in violation of Regulatee's constitutional due process rights. Regulatee's submission of information under this changed standard is not a waiver of its due process rights; an admission of TSCA violation or liability, or an admission that Regulatee's activities with the study compounds reasonably support a conclusion of substantial risk to health or to the environment. Regulatee has historically relied in good faith upon the 1978 Statement of Interpretation and Enforcement Policy criteria for determining whether study information is reportable under TSCA §8(e), 43 Fed Reg 11110 (March 16, 1978). EPA has not, to date, amended this Statement of Interpretation.

After CAP registration, EPA provided the Regulatee the June 1, 1991 "TSCA Section 8(e) Reporting Guide". This "Guide" has been further amended by EPA, EPA letter, April 10, 1992. EPA has not indicated that the "Reporting Guide" or the April 1992 amendment supersedes the 1978 Statement of Interpretation. The "Reporting Guide" and April 1992 amendment substantively lowers the Statement of Interpretation 's TSCA §8(e) reporting standard[2]. This is particularly troublesome as the "Reporting Guide" states criteria, applied retroactively, which expands upon and conflicts with the Statement of Interpretation.[3] Absent amendment of the Statement of Interpretation, the informal issuance of the "Reporting Guide" and the April 1992 amendment clouds the appropriate standard by which regulated persons must assess information for purposes of TSCA §8(e).

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[2]In sharp contrast to the Agency's 1977 and 1978 actions to soliciting public comment on the proposed and final §8(e) Policy, EPA has unilaterally pronounced §8(e) substantive reporting criteria in the 1991 Section 8(e) Guide without public notice and comment, See 42 Fed Reg 45362 (9/9/77), "Notification of Substantial Risk under Section 8(e): Proposed Guidance".

[3]A comparison of the 1978 Statement of Interpretation and the 1992 "Reporting Guide" is a appended.

Throughout the CAP, EPA has mischaracterized the 1991 guidance as reflecting "longstanding" EPA policy concerning the standards by which toxicity information should be reviewed for purposes of §8(e) compliance. Regulatee recognizes that experience with the 1978 Statement of Interpretation may cause a review of its criteri. Regulatee supports and has no objection to the Agency's amending reporting criteria *provided that* such amendment is not applied to the regulated community in an unfair way. However, with the unilateral announcement of the CAP under the auspices of an OCM enforcement proceeding, EPA has wrought a terrific unfairness since much of the criteria EPA has espoused in the June 1991 Reporting Guide and in the Agency's April 2, 1992 amendment is new criteria which does not.exist in the 1978 Statement of Interpretation and Enforcement Policy.

The following examples of new criteria contained in the "Reporting Guide" that is not contained in the Statement of Interpretation follow:

o even though EPA expressly disclaims each "status report" as being preliminary evaluations that should not be regarded as final EPA policy or intent[4], the "Reporting Guide" gives the "status reports" great weight as "sound and adequate basis" from which to determine mandatory reporting obligations. ("Guide" at page 20).

o the "Reporting Guide" contains a matrix that establishes new numerical reporting "cutoff" concentrations for acute lethality information ("Guide" at p. 31). Neither this matrix nor the cutoff values therein are contained in the Statement of Interpretation. The regulated community was not made aware of these cutoff values prior to issuance of the "Reporting Guide" in June, 1991.

othe "Reporting Guide" states new specific definitional criteria with which the Agency, for the first time, defines as 'distinguishable neurotoxicological effects'; such criteria/guidance not expressed in the 1978 Statement of Interpretation.[5];

othe "Reporting Guide" provides new review/ reporting criteria for irritation and sensitization studies; such criteria not previously found in the 1978 Statement of Interpretation/Enforcement Policy.

othe "Reporting Guide" publicizes certain EPA Q/A criteria issued to the Monsanto Co. in 1989 which are not in the Statement of Interpretation; have never been published in the Federal Register or distributed by the EPA to the Regulatee. Such Q/A establishes new reporting criteria not previously found in the 1978 Statement of Interpretation/Enforcement Policy .

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[4]The 'status reports' address the significance, if any, of particular information reported to the Agency, rather than stating EPA's interpretation of §8(e) reporting criteria. In the infrequent instances in which the status reports contain discussion of reportability, the analysis is invariably quite limited, without substantial supporting scientific or legal rationale.

[5] *See, e.g,* 10/2/91 letter from Du Pont to EPA regarding the definition of 'serious and prolonged effects' as this term may relate to transient anesthetic effects observed at lethal levels; 10/1/91 letter from the American Petroleum Institute to EPA regarding clarification of the Reporting Guide criteria.

In discharging its responsibilities, an administrative agency must give the regulated community fair and adequate warning to as what constitutes noncompliance for which penalties may be assessed.

> Among the myriad applications of the due process clause is the fundamental principle that statutes and regulations which purport to govern conduct must give an adequate warning of what they command or forbid.... Even a regulation which governs purely economic or commercial activities, if its violation can engender penalties, must be so framed as to provide a constitutionally adequate warning to those whose activities are governed.

Diebold, Inc. v. Marshall, 585 F.2d 1327, 1335-36 (D.C. Cir. 1978). *See also*, Rollins Environemntal Services (NJ) Inc. v. U.S. Environmental Protection Agency, 937 F. 2d 649 (D.C. Cir. 1991).

While neither the are rules, This principle has been applied to hold that agency 'clarification', such as the Statement of Interpretation, the "Reporting Guide" nor the April 1992 amendments will not applied retroactively.

> ...a federal court will not retroactively apply an unforeseeable interpretation of an administrative regulation to the detriment of a regulated party on the theory that the post hoc interpretation asserted by the Agency is generally consistent with the policies underlying the Agency's regulatory program, when the semantic meaning of the regulations, as previously drafted and construed by the appropriate agency, does not support the interpretation which that agency urges upon the court.

Standard Oil Co. v. Federal Energy Administration, 453 F. Supp. 203, 240 (N.D. Ohio 1978), aff'd sub nom. Standard Oil Co. v. Department of Energy, 596 F.2d 1029 (Em. App. 1978):

The 1978 Statement of Interpretation does not provide adequate notice of, and indeed conflicts with, the Agency's current position at §8(e) requires reporting of all 'positive' toxicological findings without regard to an assessment of their relevance to human health. In accordance with the statute, EPA's 1978 Statement of Interpretation requires the regulated community to use scientific judgment to evaluate the significance of toxicological findings and to determining whether they reasonably support a conclusion of a substantial risk. Part V of the Statement of Interpretation urges persons to consider "the fact or probability" of an effect's occurrence. Similarly, the 1978 Statement of Interpretation stresses that an animal study is reportable only when "it contains reliable evidence ascribing the effect to the chemical." 43 Fed Reg. at 11112. Moreover, EPA's Statement of Interpretation defines the substantiality of risk as a function of both the seriousness of the effect and the probability of its occurrence. 43 Fed Reg 11110 (1978). Earlier Agency interpretation also emphasized the "substantial" nature of a §8(e) determination. See 42 Fed Reg 45362, 45363

(1977). [Section 8(e) findings require "extraordinary exposure to a chemical substance...which critically imperil human health or the environment"].

The recently issued "Reporting Guide" and April 1992 Amendment guidance requires reporting beyond and inconsistent with that required by the Statement of Interpretation. Given the statute and the Statement of Interpretation's explicit focus on substantial human or environmental risk, whether a substance poses a "substantial risk" of injury requires the application of scientific judgment to the available data on a case-by-case basis.

If an overall weight-of-evidence analysis indicates that this classification is unwarranted, reporting should be unnecessary under §8(e) because the available data will not "reasonably support the conclusion" that the chemical presents a substantial risk of serious adverse consequences to human health.

Neither the legislative history of §8(e) nor the plain meaning of the statute support EPA's recent lowering of the reporting threshold that TSCA §8(e) was intended to be a sweeping information gathering mechanism. In introducing the new version of the toxic substances legislation, Representative Eckhart included for the record discussion of the specific changes from the version of H. R. 10318 reported by the Consumer Protection and Finance Subcommittee in December 1975. One of these changes was to modify the standard for reporting under §8(e). The standard in the House version was changed from "causes or contributes to an unreasonable risk" to "causes or significantly contributes to a substantial risk". This particular change was one of several made in TSCA §8 to avoid placing an undue burden on the regulated community. The final changes to focus the scope of Section 8(e) were made in the version reported by the Conference Committee.

The word "substantial" means "considerable in importance, value, degree, amount or extent". Therefore, as generally understood, a "substantial risk" is one which will affect a considerable number of people or portion of the environment, will cause serious injury and is based on reasonably sound scientific analysis or data. Support for the interpretation can be found in a similar provision in the Consumer Product Safety Act. Section 15 of the CPSA defines a "substantial product hazard" to be:

> "a product defect which because of the pattern of defect, the number of defective products distributed in commerce, the severity of the risk, or otherwise, creates a substantial risk of injury to the public."

Similarly, EPA has interpreted the word 'substantial' as a quantitative measurement. Thus, a 'substantial risk' is a risk that can be quantified, *See,* 56 Fed Reg 32292, 32297 (7/15/91). Finally, since information pertinent to the exposure of humans or the environment to chemical substances or mixtures may be obtained by EPA through Sections 8(a) and 8(d) regardless of the degree of potential risk, §8(e) has specialized function. Consequently, information subject to §8(e) reporting should be of a type which would lead a reasonable man to conclude that some type action was required immediately to prevent injury to health or the environment.

Attachment

Comparison:

Reporting triggers found in the 1978 "Statement of Interpretation/ Enforcement Policy",43 Fed Reg 11110 (3/16/78) and the June 1991 *Section 8(e) Guide.*

TEST TYPE	1978 POLICY CRITERIA EXIST?	New 1991 GUIDE CRITERIA EXIST?
ACUTE LETHALITY		
Oral	N}	Y}
Dermal	N}	Y}
Inhalation (Vapors)	}[6]	}[7]
aerosol	N}	Y}
dusts/ particles	N}	Y}
SKIN IRRITATION	N	Y[8]
SKIN SENSITIZATION (ANIMALS)	N	Y[9]
EYE IRRITATION	N	Y[10]
SUBCHRONIC (ORAL/DERMAL/INHALATION)	N	Y[11]
REPRODUCTION STUDY	N	Y[12]
DEVELOPMENTAL TOX	Y[13]	Y[14]

[6] 43 Fed Reg at 11114, comment 14:
"This policy statements directs the reporitng of specifiec effects when unknown to the Administrator. Many routine tests are based on a knowledge of toxicity associated with a chemicalL unknown effects occurring during such a range test may have to be reported if they are those of concern tot he Agency and if the information meets the criteria set forth in Parts V and VII."

[7] Guide at pp.22, 29-31.

[8] Guide at pp-34-36.

[9] Guide at pp-34-36.

[10] Guide at pp-34-36.

[11] Guide at pp-22; 36-37.

[12] Guide at pp-22

[13] 43 Fed Reg at 11112
"Birth Defects" listed.

[14] Guide at pp-22

NEUROTOXICITY	N	Y[15]
CARCINOGENICITY	Y[16]	Y[17]
MUTAGENICITY		
In Vitro	Y}[18]	Y} [19]
In Vivo	Y}	Y}
ENVIRONMENTAL		
Bioaccumulation	Y}	N
Bioconcentration	Y}[20]	N
Oct/water Part. Coeff.	Y}	N
Acute Fish	N	N
Acute Daphnia	N	N
Subchronic Fish	N	N
Subchronic Daphnia	N	N
Chronic Fish	N	N
AVIAN		
Acute	N	N
Reproductive	N	N
Reprodcutive	N	N

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[15] Guide at pp-23; 33-34.

[16] 43 Fed Reg at 11112
"Cancer" listed

[17] Guide at pp-21.

[18] 43 Fed Reg at 11112; 11115 at Comment 15
"Mutagenicity" listed/ *in vivo* vs *invitro* discussed; discussion of "Ames test".

[19] Guide at pp-23.

[20] 43 Fed Reg at 11112; 11115 at Comment 16.

CAS# 683-10-3
Chem: N-lauryl betaine (25% aqueous solution of sodium salt)
Title: Acute oral test; skin irritation tests on guinea pigs; primary irritation on human subjects
Date: 6/13/63
Summary of Effects: Strong erythema - humans

Haskell Laboratory File 13

Copies to: C. W. Maynard, Jr. (3)
S. B. Cupp (6)

E. I. du Pont de Nemours and Company
Haskell Laboratory for Toxicology and Industrial Medicine

HASKELL LABORATORY REPORT NO. 68-63 HR NO. 656

Material Tested: N-Lauryl Betaine (25% aqueous solution of sodium salt) Haskell No.: 3385

Submitted by: C. W. Maynard, Jr., Organic Chemicals Department, Jackson Laboratory Other Codes: TLF-1191-B; JLNB-1795-79

ACUTE ORAL TEST

Procedure: The test material, as an aqueous solution containing 25% active ingredient as the sodium salt, was administered by stomach tube in single doses to young adult CbR-CD male rats. Survivors were sacrificed 12-14 days later.

Aqueous Sol'n Tested*	Dose* (mg/kg)	Mortality**	Toxic Signs	ALD*
60	17,000	D - 1 d.	Lethal Doses: Severe weight loss, diarrhea, bloody discharge from nose and mouth at death (17,000 and 11,000 mg/kg)	
60	11,000	D - 1 d.		
60	7500	D - 2 d.		7500 mg/kg
60	5000	S - 13 d.	Nonlethal Doses: Weight loss and diarrhea at 5000 mg/kg, increased water intake at 5000 and 2250 mg/kg	
60	3400	S - 12 d.		
20	2250	S - 14 d.		
20	670	S - 14 d.		

* Based on product as received.
** D - ( ) d. = Found dead ( ) days after dosing.
S - ( ) d. = Sacrificed ( ) days after dosing.

Summary: TLF-1191-B, containing 25% N-lauryl betaine as the sodium salt, has low acute oral toxicity for the male rat, its Approximate Lethal Dose (ALD) being 7500 mg/kg of body weight. Large doses (5000 mg/kg and above) produced diarrhea in the rat. Examination of the tissues has not been completed.

SKIN IRRITATION TESTS ON GUINEA PIGS

Method: One drop of a 10, 1 or 0.1% (a.i.) solution was applied to an area of intact shaved skin of each of 10 male albino guinea pigs. Observations were made 1 day after treatment and when possible at 2 and 5 days.

Results:

% (a.i.) Test Solution	1 Day	2 Days	5 Days
10	severe erythema and edema of skin of all animals	2 necrosis 7 severe erythema and edema 1 moderate erythema	4 necrosis 6 healing with desquamation
1	no irritation	no observation	no observation
0.1	no irritation	no irritation	no observation

Summary: A 10% (a.i.) solution of N-lauryl betaine was a very strong irritant for guinea pig skin, producing initially severe erythema and edema which progressed to necrosis within 2-5 days. The 1% and 0.1% solutions caused no irritation.

PRIMARY IRRITATION ON HUMAN SUBJECTS

Occluded Patch

Method: One-half inch squares of an absorbent material moistened with 3 drops of the test solution were applied to the arms of 7 subjects, covered with cellophane and held in place by adhesive tape for 24 hours. Observations were made immediately after removal of the patches and also 1-2 and/or 3-7 hours later. The maximum reactions which occurred 2-7 hours after removal of patches are used here for evaluating the irritation potential of the material.

Results:

% (a.i.) Solution	Reactions Observed After 2-7 Hours
10	1 strong erythema, 4 moderate, 2 mild
1	5 strong erythema, 1 moderate, 1 mild

Test on Uncovered Skin

Method: Between 9:00 and 10:30 A.M. one drop of a 0.1% (a.i.) solution was applied to the skin of the inner forearm of 11 women and 8 men, and spread over an area of about 22 mm in diameter. The area was not covered and subjects were requested to keep sleeves rolled up for rest of working day and not to wash the area until the final observation. Observations were made as indicated.

Results:

6 Hours After Application	25-30 Hours After Application
no reactions	no reactions

PRIMARY IRRITATION AND SENSITIZATION TEST

Method: Three-quarter inch squares of an absorbent material, moistened with 10 drops of a 0.1% (a.i.) solution, were applied to the arms of 9 men and to the arms or legs of 11 women, covered with cellophane and held in place by adhesive tape for 6 days. After a rest period of 10 days new patches were applied for the 24-hour challenge test. Observations were made 1, 2 and 6 days after the first application and 1 and 4 days after the final application.

Results: There were no reactions 1 and 2 days after the initial application, but when the patches were removed after 6 days continuous contact there was 1 strong reaction and a day later there was a mild reaction on a second subject. No reactions were observed immediately after the removal of the 24-hour challenge test (Friday). During the next 4 days, 4 delayed reactions were noted, 1 of which was strong, 1 moderate and 2 mild. However, because of the nature of these reactions they were considered primary irritation and not sensitization.

Summary: When N-lauryl betaine was tested as a 10% (a.i.) and 1% (a.i.) solution under an occluded patch it produced strong to moderate irritation on 5 or 6 of the 7 subjects tested, respectively.

The irritation and sensitization tests show that under certain circumstances a 0.1% (a.i.) solution applied under an occluded patch is an irritant. It should be noted that the instances of irritation were observed either after prolonged (6 days) contact or within 24 hours after patches were removed. Subsequent tests on uncovered skin with a 0.1% solution caused no reactions for as long as 30 hours after application. The material did not cause sensitization. Therefore, irritation would not be expected to occur at this concentration unless treated material were in very close contact with the skin.

EYE IRRITATION TESTS

Method: 0.1 ml of the aqueous test solution was instilled into the conjunctival sac of each of 6 male albino rabbits. The treated eyes were not washed; the untreated eyes served as controls. Observations with the unaided eye under strong artificial light and also with a hand slit-lamp were made daily for 4 days and finally at 7 days after treatment.

Results:

% a.i. Test Solution	Days after Treatment	Ocular Effect During 7-Day Observation Period		
		Cornea	Iris	Conjunctivae
10	1	2/6 dullness - 4/6 turbidity	3/6 injected blood vessels 3/6 mild iritis	6/6 mild to moderate inflammation
	4	2/6 dullness - 3/6 turbidity 1/6 mild opacity with vascularization	3/6 injected blood vessels 3/6 normal	6/6 mild inflammation
	7	1/6 turbidity - 2/6 mild opacity with vascularization 3/6 normal	6/6 normal	2/6 mild inflammation 4/6 normal
6.25	1	2/6 dullness - 4/6 turbidity	6/6 injected blood vessels	6/6 mild to moderate inflammation
	4	3/6 turbidity with vascularization in 1 eye - 3/6 normal	all normal	6/6 mild inflammation
	7	3/6 moderate opacity with vascularization in 2 eyes 3/6 normal	all normal	1/6 very mild inflammation 5/6 normal
5	1	6/6 dullness	6/6 injected blood vessels	6/6 mild inflammation
	4	3/6 dullness - 3/6 turbidity	2/6 injected blood vessels 4/6 normal	6/6 very mild inflammation
	7	3/6 dullness with vascularization in 1 eye - 1/6 turbidity with vascularization 2/6 normal	1/6 injected blood vessels 5/6 normal	1/6 very mild inflammation 5/6 normal

Summary: A 10% (a.i.) solution of N-lauryl betaine produced significant injury in 4 of 6 treated eyes and the 6.25% solution produced significant injury in 3 eyes. The 5% solution produced no serious injury through 4 days after treatment; the minimal vascularization noted at 7 days is the type that usually disappears. Therefore, concentrations of N-lauryl betaine above 5% cannot be recommended for use in cosmetics.

Report by: Regina J. Neher

RJN/mfs
Date: June 13, 1963

Approved by: D B. Howes, John A Jaffe Jr.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

Mark H. Christman
Counsel
E. I. Du Pont De Nemours and Company
Legal D-7010-1
1007 Market Street
Wilmington, Delaware 19898

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

APR 18 1995

EPA acknowledges the receipt of information submitted by your organization under Section 8(e) of the Toxic Substances Control Act (TSCA). For your reference, copies of the first page(s) of your submission(s) are enclosed and display the TSCA §8(e) Document Control Number (e.g., 8EHQ-00-0000) assigned by EPA to your submission(s). Please cite the assigned 8(e) number when submitting follow-up or supplemental information and refer to the reverse side of this page for "EPA Information Requests".

All TSCA 8(e) submissions are placed in the public files unless confidentiality is claimed according to the procedures outlined in Part X of EPA's TSCA §8(e) policy statement (43 FR 11110, March 16, 1978). Confidential submissions received pursuant to the TSCA §8(e) Compliance Audit Program (CAP) should already contain information supporting confidentiality claims. This information is required and should be submitted if not done so previously. To substantiate claims, submit responses to the questions in the enclosure "Support Information for Confidentiality Claims". This same enclosure is used to support confidentiality claims for non-CAP submissions.

Please address any further correspondence with the Agency related to this TSCA 8(e) submission to:

Document Processing Center (7407)
Attn: TSCA Section 8(e) Coordinator
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency
Washington, D.C. 20460-0001

EPA looks forward to continued cooperation with your organization in its ongoing efforts to evaluate and manage potential risks posed by chemicals to health and the environment.

Sincerely,

Terry R. O'Bryan

Terry R. O'Bryan
Risk Analysis Branch

Enclosure 12353A

Triage of 8(e) Submissions

Date sent to triage: APR 20 1995

Submission number: 12353A

NON-CAP (CAP)

TSCA Inventory: (Y) N D

Study type (circle appropriate):

Group 1 - Dick Clements (1 copy total)

ECO AQUATO

Group 2 - Ernie Falke (1 copy total)

(ATOX) SBTOX (SEN) w/NEUR

Group 3 - Elizabeth Margosches (1 copy each)

STOX CTOX (EPI) RTOX GTOX

STOX/ONCO CTOX/ONCO IMMUNO CYTO NEUR

Other (FATE, EXPO, MET, etc.): _____

Notes:

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entire document: 0 (1) 2 **pages** 1, 1st TAB **pages** 4 TABS

Notes:

Contractor reviewer : [illegible] **Date:** 4/3/95

CECATS\TRIAGE TRACKING DBASE ENTRY FORM

CECATS DATA:
Submission # 8EHQ-1092-12353 SEQ. A

TYPE: (INT.) SUPP FLWP

SUBMITTER NAME: E.I. Dupont de Nemours and Company

SUB. DATE: 10/15/92 OTS DATE: 10/27/92 CSRAD DATE: 02/23/95

INFORMATION REQUESTED: FLWP DATE:
0501 NO INFO REQUESTED
0502 INFO REQUESTED (TECH)
0503 INFO REQUESTED (VOL ACTIONS)
0504 INFO REQUESTED (REPORTING RATIONALE)

DISPOSITION:
(0639) REFER TO CHEMICAL SCREENING
(0678) CAP NOTICE

VOLUNTARY ACTIONS:
(0401) NO ACTION REPORTED
0402 STUDIES PLANNED/UNDERWAY
0403 NOTIFICATION OF WORKER/CITIZENS
0404 LABEL/MSDS CHANGES
0405 PROCESS/HANDLING CHANGES
0406 APP/USE DISCONTINUED
0407 PRODUCTION DISCONTINUED
0408 CONFIDENTIAL

CHEMICAL NAME: N-lauryl betaine

C.A.S.# 683-10-3

INFORMATION TYPE:		P F C
0201	ONCO (HUMAN)	01 02 04
0202	ONCO (ANIMAL)	01 02 04
0203	CELL. TRANS (IN VITRO)	01 02 04
0204	MUTA (IN VITRO)	01 02 04
0205	MUTA (IN VIVO)	01 02 04
0206	REPRO/TERATO (HUMAN)	01 02 04
0207	REPRO/TERATO (ANIMAL)	01 02 04
0208	NEURO (HUMAN)	01 02 04
0209	NEURO (ANIMAL)	01 02 04
0210	ACUTE TOX. (HUMAN)	01 02 04
0211	CHR. TOX. (HUMAN)	01 02 04
(0212)	ACUTE TOX. (ANIMAL)	01 02 04
0213	SUB ACUTE TOX (ANIMAL)	01 02 04
0214	SUB CHRONIC TOX (ANIMAL)	01 02 04
0215	CHRONIC TOX (ANIMAL)	01 02 04

INFORMATION TYPE:		P F C
0216	EPI/CLIN	01 02 04
0217	HUMAN EXPOS (PROD CONTAM)	01 02 04
0218	HUMAN EXPOS (ACCIDENTAL)	01 02 04
0219	HUMAN EXPOS (MONITORING)	01 02 04
0220	ECO/AQUA TOX	01 02 04
0221	ENV. OCCC/REL/FATE	01 02 04
0222	EMER INCI OF ENV CONTAM	01 02 04
0223	RESPONSE REQEST DELAY	01 02 04
0224	PROD/COMP/CHEM ID	01 02 04
0225	REPORTING RATIONALE	01 02 04
0226	CONFIDENTIAL	01 02 04
(0227)	ALLERG (HUMAN)	01 02 04
(0228)	ALLERG (ANIMAL)	01 02 04
0239	METAB/PHARMACO (ANIMAL)	01 02 04
0240	METAB/PHARMACO (HUMAN)	01 02 04

INFORMATION TYPE:		P F C
0241	IMMUNO (ANIMAL)	01 02 04
0242	IMMUNO (HUMAN)	01 02 04
0243	CHEM/PHYS PROP	0 02 04
0244	CLASTO (IN VITRO)	01 02 04
0245	CLASTO (ANIMAL)	01 02 04
0246	CLASTO (HUMAN)	01 02 04
0247	DNA DAM/REPAIR	01 02 04
0248	PROD/USE/PROC	01 02 04
0251	MSDS	01 02 04
0299	OTHER	01 02 04

Atox/Sen

TRIAGE DATA:

NON-CBI INVENTORY: (YES) NO INDETERMINI

ONGOING REVIEW: YES (DROP/REFER) NO (CONTINUE) REFER

SPECIES: RAT GP HMN

TOXICOLOGICAL CONCERN: LOW MED (HIGH)

USE:

PRODUCTION:

CAS SR

COMMENTS

8(E)-12353A

L/H/M/L/M

ACUTE ORAL TOXICITY IN MALE RATS IS OF LOW CONCERN BASED ON AN LD50 BETWEEN 5000 AND 7500 MG/KG. DOSAGE (GAVAGE) AND MORTALITY DATA ARE AS FOLLOWS: 670 MG/KG (0/1); 2250 MG/KG (0/1); 3400 MG/KG (0/1); 5000 MG/KG (0/1); 7500 MG/KG (1/1); 11,000 MG/KG (1/1); AND 17,000 MG/KG (1/1). TOXIC SIGNS INCLUDED WEIGHT LOSS, DIARRHEA, AND BLOODY DISCHARGE FROM NOSE AND MOUTH.

ACUTE DERMAL IRRITATION IN MALE GUINEA PIGS IS OF HIGH CONCERN. DOSAGE WAS ONE DROP OF 0.1%, 1.0%, OR 10% TEST SUBSTANCE. AT 0.1% AND 1.0% THERE WAS NO IRRITATION (0/10, EACH CONCENTRATION). AT 10%, NECROSIS (2/10), SEVERE ERYTHEMA AND EDEMA (7/10), AND MODERATE ERYTHEMA (1/10) WERE OBSERVED.

ACUTE DERMAL IRRITATION IN HUMANS IS OF MEDIUM CONCERN. DOSAGE (24-HOURS) WAS 1 DROP OF 0.1% (NONOCCLUDED), AND 3 DROPS (OCCLUDED) OF 1.0% OR 10%. AT 1%, STRONG (5/7), MODERATE (1/7), AND MILD (1/7) ERYTHEMA WAS OBSERVED. AT 10%, STRONG (1/7), MODERATE (4/7), AND MILD (2/7) ERYTHEMA WAS OBSERVED. NO REACTIONS WERE OBSERVED AT 0.1% (0/11 WOMEN, 0/8 MEN).

DERMAL SENSITIZATION IN HUMANS IS OF LOW CONCERN BASED ON NO IRRITATION DURING CHALLENGE AFTER A 6-DAY, OCCLUDED EXPOSURE TO 10 DROPS OF 1% TEST SUBSTANCE APPLIED TO 8 MEN AND 11 WOMEN. A 24-HOUR CHALLENGE TEST WAS APPLIED AFTER A 10-DAY REST PERIOD. DURING THE 4 DAYS AFTER CHALLENGE, 4 DELAYED REACTION WERE NOTED, 1 STRONG, 1 MODERATE, AND 2 MILD. THESE REACTIONS WERE CONSIDERED BY THE STUDY AUTHORS TO BE EVIDENCE OF PRIMARY IRRITATION AND NOT SENSITIZATION.

EYE IRRITATION IN RABBITS IS OF MEDIUM CONCERN. DOSAGES, WITH 6 ANIMALS/DOSE, WERE 0.1 ML OF 5%, 6.26% OR 10% TEST SUBSTANCE. IRRITATION SCORES AND EYE REACTIONS IN INDIVIDUAL ANIMALS WERE NOT PROVIDED. IRRITATION WAS CHARACTERIZED BY THE STUDY AUTHORS AS NO SERIOUS INJURY AT 5%, SIGNIFICANT INJURY IN 3/6 AT 6.25%, AND SIGNIFICANT INJURY IN 4/6 AT 10%. FINDINGS AT 6.25 AND 10% INCLUDED CORNEAL DULLNESS, TURBIDITY, AND VASCULARIZATION; INJECTED BLOOD VESSELS OF THE IRIS; AND MILD TO MODERATE INFLAMMATION OF THE CONJUNCTIVAE.

8E Number and Chemical Name	Rank	Reason or Brief Description
-12301 Eriopon H, CAS 68603-42-9	Low	The chemical was tested for potential skin sensitization and 5 of 200 subjects reacted positively. The chemical has been withdrawn from commerce.
-12306 Amine O, CAS 2647-62-5	Low	The chemical was tested for potential skin sensitization and 5 of 200 subjects reacted positively. The chemical was withdrawn from commerce.
-12309 Alrosperse 100, Mixture of CAS Nos.: 45-01-0, 1338-43-8, 68966-38-1, 50-21-5	Low	In 1963 a contract laboratory evaluated the mixture as to its potential as a primary irritant, fatiguing or dermal sensitization agent. Five of 200 subjects had reactions and upon rechallenge 2/200 also had reactions. The investigator interpreted this result as demonstrating "potential" rather than "mandatory" primary irritant characteristics for the chemical.
-12353 N-lauryl betaine, CAS 683-10-3	Low	In 1963 the material was evaluated in humans for primary dermal irritation in occluded patch testing. Six of 7 subjects had strong to moderate irritant reactions of various intensities to 10% and 1% solutions; 24-hour patches of 0.1% solution showed no reactions, but after 6 days 3-4 of 20 had strong or moderate reactions. The company toxicologist recommended the chemical be dropped from consideration for cosmetic use.